



Evaluating Representation of Minority Populations in Clinical Research at Albany Medical College: A Comparative Analysis

Benly Centeno, BSN, RN, Shaneé Hoke, BSN, RN, CCRN, Jun Yu, BSN, RN,
Meagan Wakefield, DNP, CRNA, and Shannon Stephens, PhD*

Center for Nurse Anesthesiology, Department of Neuroscience and Experimental Therapeutics*
Albany Medical College

Background

- Diversity in clinical research is essential for equitable health outcomes and valid generalizability.
- National data show persistent underrepresentation of racial and ethnic minority groups in research participation.
- Previous rapid scoping review identified key barriers (e.g., mistrust, access, communication), facilitators (e.g., community partnership), and effective interventions (e.g., targeted recruitment strategies).

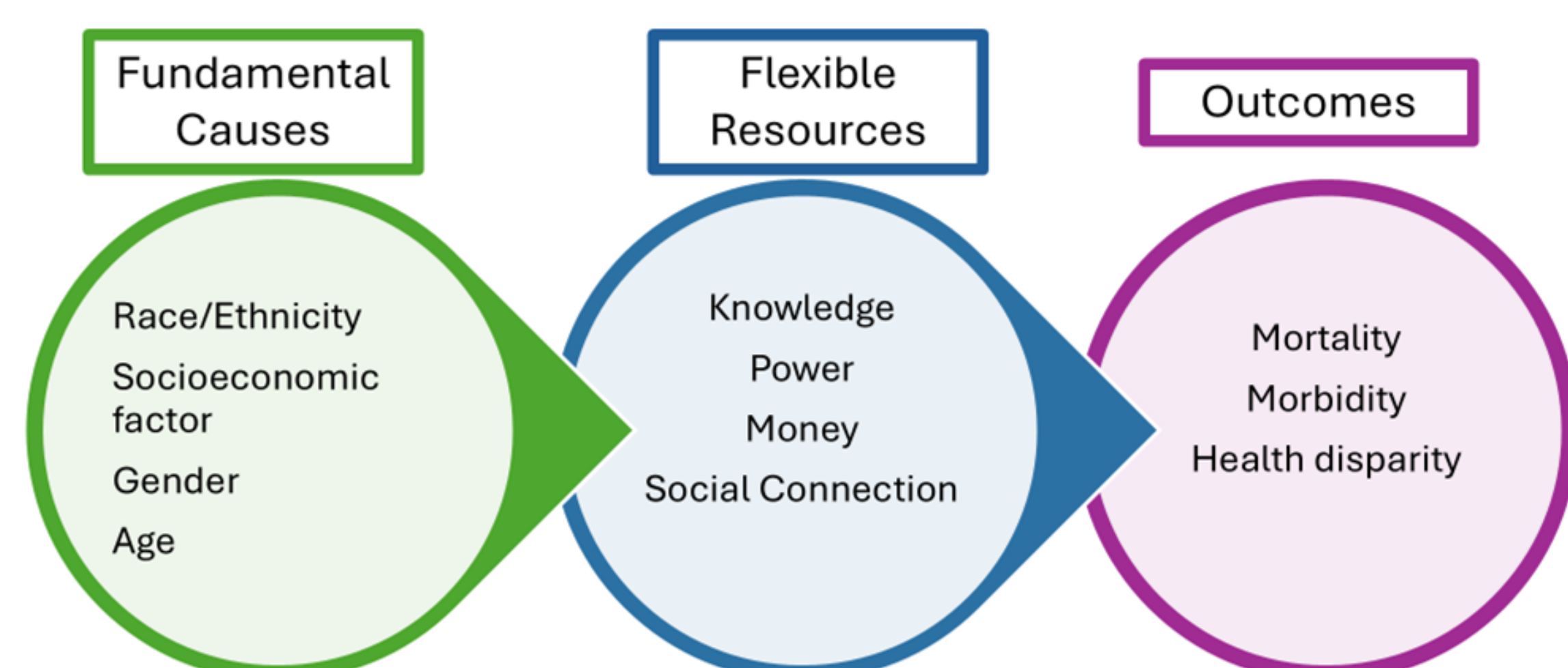
Purpose

The purpose of this study is to determine whether studies published by or in collaboration with Albany Medical College demonstrate adequate minority representation, in alignment with local and national demographic benchmarks from the U.S. Census Bureau.

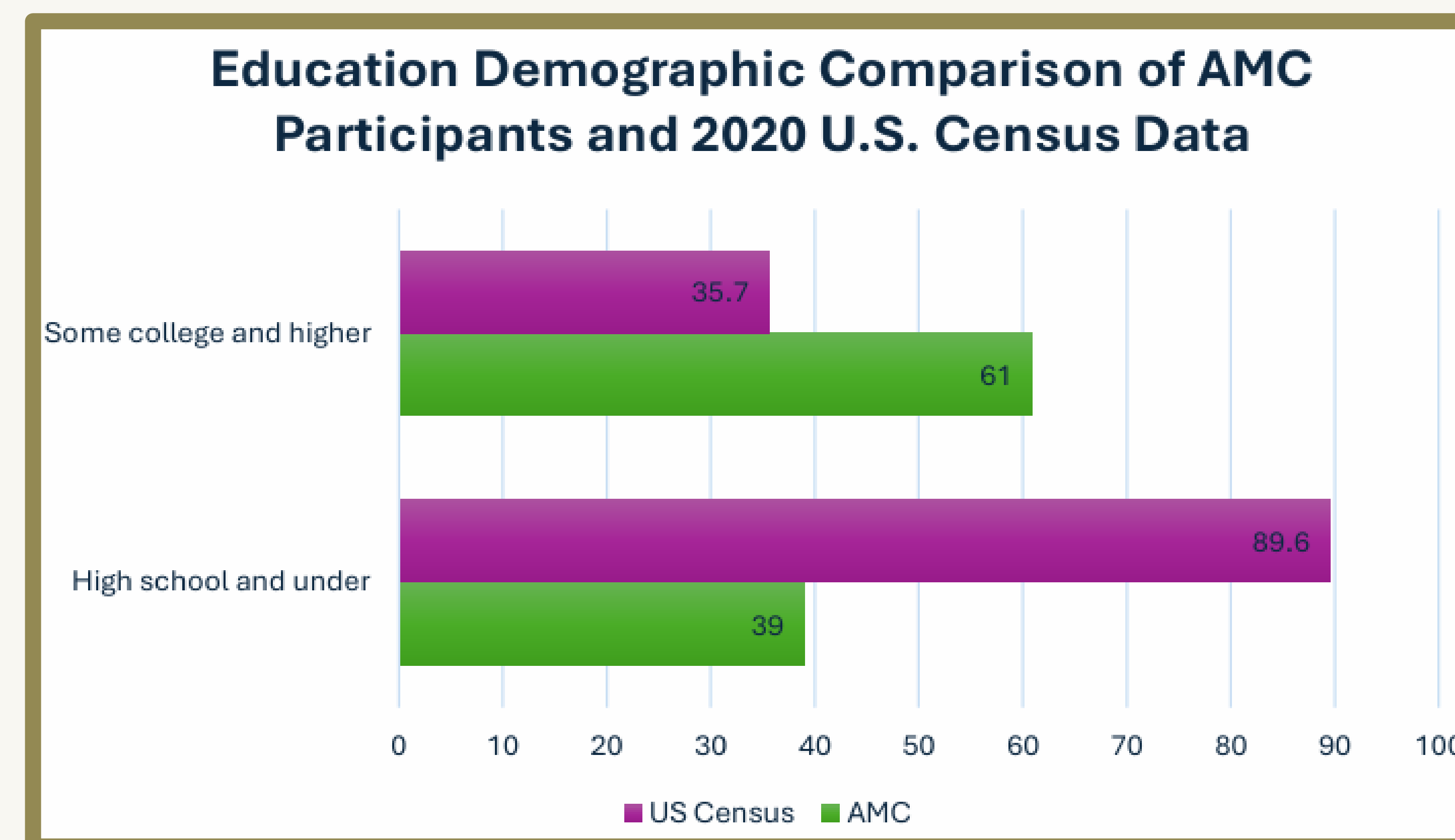
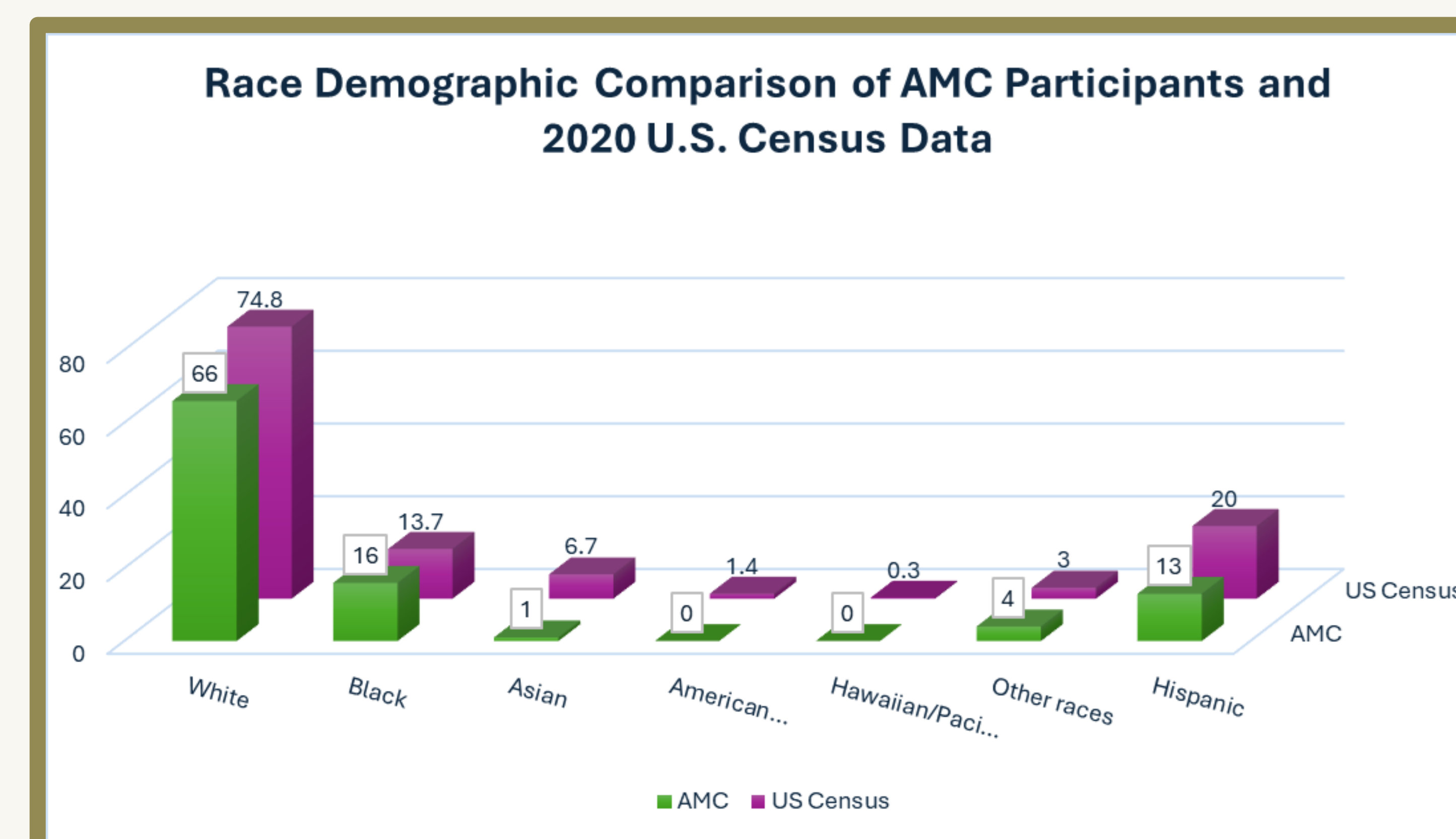
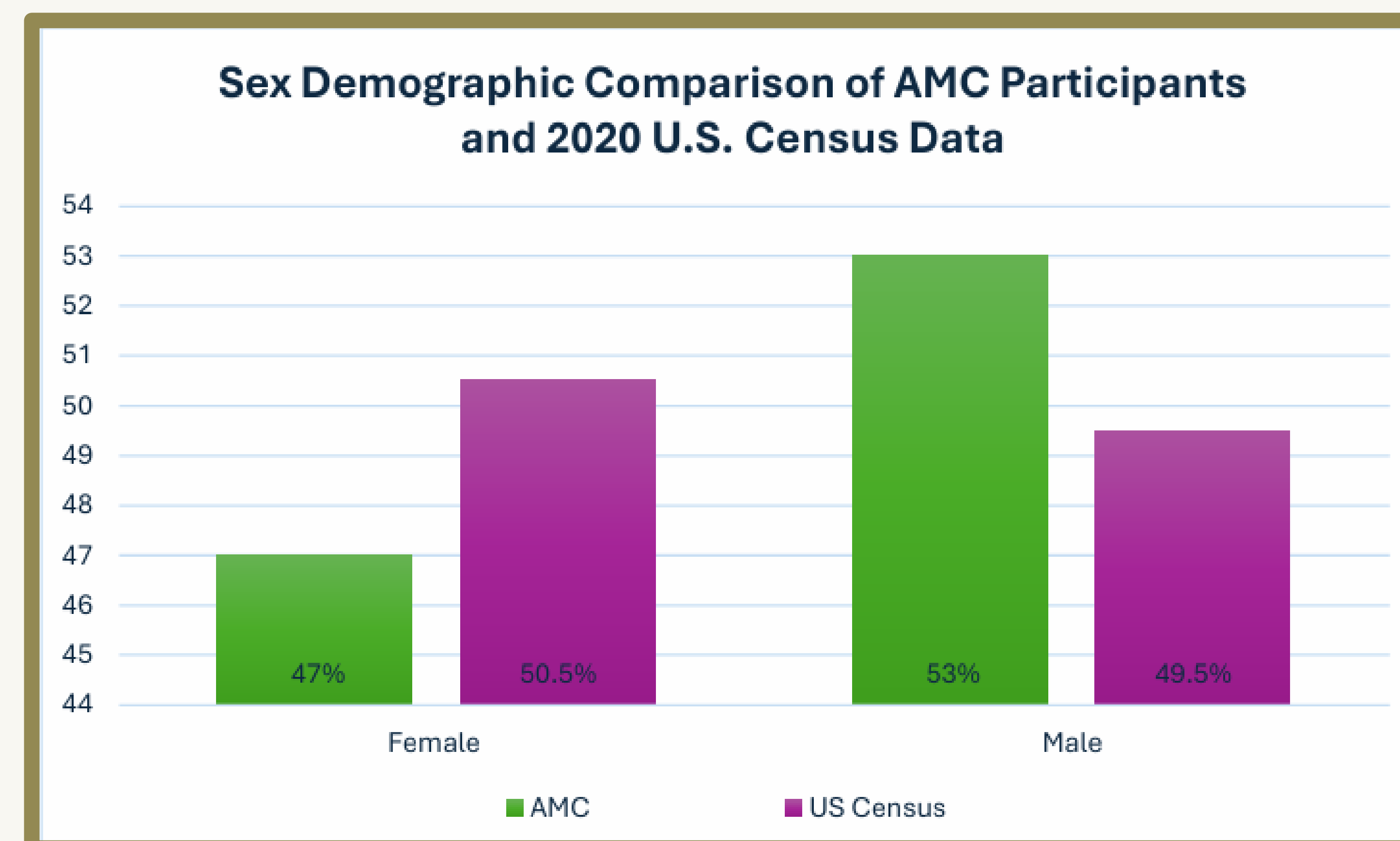
Method

- Retrospective descriptive analysis
- Data Source: PubMed database
- Inclusion Criteria: All AMC-affiliated human subject studies with reported demographic data between 2004-2024
- Variables Collected
 - Race
 - Ethnicity
 - Age
 - Sex
 - Education level
 - Income level
 - Study type
- Benchmark Comparison
 - Albany County Census Data
 - US Census & NIH Inclusion Enrollment Reports
- Analysis
 - Enrollment Fractions
 - Comparison Ratios
 - Identification of over- and underrepresentation trends

Fundamental Cause Theory



Results



Results

24 studies met the inclusion criteria of our study representing a total of 5,117 participants.

Demographic reporting across studies:

- 100% reported sex
- 67% (16/24) reported race and ethnicity
- 71% (17/24) reported age
- 21% (5/24) reported education level
- 4% (1/24) reported income

Preliminary comparative analysis suggests variability in racial and ethnic representation across studies, with some minority groups underrepresented relative to Albany County and national census benchmarks. Inconsistent reporting of socioeconomic variables limited assessment of broader structural representation.

Discussion

- While most studies reported sex and age demographics, race and ethnicity were not consistently reported, and socioeconomic indicators were largely absent. Variable demographic reporting limits the ability to fully evaluate equitable research participation and may obscure patterns of underrepresentation.
- These findings underscore the importance of standardized demographic reporting and institutional accountability measures to align research participant demographics with community benchmarks. This is essential to ensure generalizability of evidence and promote equitable healthcare delivery.
- Future efforts should prioritize systematic demographic transparency and targeted strategies to improve minority inclusion in clinical research.

References

- <https://qr.codes/UFOGxm>

